

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	125	((((hafnium adj aluminium adj oxide) (hafnium adj aluminate) (HfAlO)) same ald)	US- PGPUB; USPAT	OR	ON	2008/01/30 14:44
S1	1	("20050227003").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/12/11 15:15
S2	1	("6355561").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/06/19 16:55
S3	26	(ALD or (atomic adj layer adj deposition)) same (first adj metal) same (second adj metal) same (third adj metal)	US- PGPUB; USPAT; USOCR	OR	ON	2007/08/27 14:59
S4	178	(ALD or (atomic adj layer adj deposition)) same (first adj metal) same (second adj metal)	US- PGPUB; USPAT; USOCR	OR	ON	2007/06/20 07:55
S5	6	("2004/0266217").URPN.	USPAT	OR	ON	2007/06/19 17:17
S6	4	(ALD or (atomic adj layer adj deposition)) same (pulse) same aluminium same hafnium same second	US- PGPUB; USPAT; USOCR	OR	ON	2007/06/20 07:55
S7	39	(ALD or (atomic adj layer adj deposition)) same (pulse) same aluminium same hafnium	US- PGPUB; USPAT; USOCR	OR	ON	2007/06/20 08:00

S8	1320	(ALD or (atomic adj layer adj deposition)) and (aluminum same hafnium)	US- PGPUB; USPAT; USOCR	OR	ON	2007/06/27 17:12
S9	56	(ALD or (atomic adj layer adj deposition)) same (first adj (metal or precursor)) same (second adj (metal or precursor)) same (third adj (metal or precursor))	US- PGPUB; USPAT; USOCR	OR	ON	2007/08/24 12:45
S10	3	(ALD or (atomic adj layer adj deposition)) and TMA and TDMAH and TMEAH	US- PGPUB; USPAT; USOCR	OR	ON	2007/06/27 17:16
S11	20	(ALD or (atomic adj layer adj deposition)) and TMA and (TDMAH or TMEAH)	US- PGPUB; USPAT; USOCR	OR	ON	2007/06/28 09:40
S12	250	(ALD or (atomic adj layer adj deposition)) and TMA and (hafnium)	US- PGPUB; USPAT; USOCR	OR	ON	2007/06/28 10:04
S13	14	(ALD or (atomic adj layer adj deposition)) and (((first or second) adj precursor) with Aluminum) and (((first or second) adj precursor) with hafnium)	US- PGPUB; USPAT; USOCR	OR	ON	2007/06/28 10:05
S14	1	("2004/0238872").URPN.	USPAT	OR	ON	2007/06/28 10:07
S15	4	("20030040153"   "20030234417"   "20040171280"   "6420279").PN. OR ("7135422").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2007/07/06 09:15
S16	633	(ALD or (atomic adj layer adj deposition)) same (first adj (metal or precursor)) same (second adj (metal or precursor))	US- PGPUB; USPAT; USOCR	OR	ON	2007/08/24 12:46

S17	2	(ALD or (atomic adj layer adj deposition)) same (first adj (metal or precursor)) same (second adj (metal or precursor)) and aluminum and hafnium and titanium and ozone and nitrogen and silicon and TMA and TDMAH and TMEA	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/24 12:51
S18	78	(ALD or (atomic adj layer adj deposition)) same (first adj (metal or precursor)) same (second adj (metal or precursor)) and aluminum and hafnium and titanium and ozone and nitrogen and silicon	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/24 13:39
S19	4	(ALD or (atomic adj layer adj deposition)) same (first adj (metal or precursor)) same (second adj (metal or precursor)) and aluminum and hafnium and titanium and ozone and nitrogen and silicon and TMA and TDMAH	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/24 12:53
S20	31	(ALD or (atomic adj layer adj deposition)) same (first adj (metal or precursor)) same (second adj (metal or precursor)) and aluminum and hafnium and titanium and ozone and nitrogen and silicon and TMA	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/24 12:53
S21	4	("20030040153"   "20030234417"   "20040171280"   "6420279"). PN. OR ("7135422").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/24 13:02
S22	60	(ALD or (atomic adj layer adj deposition)) same (first adj (metal or precursor)) same (second adj (metal or precursor)) and aluminum and hafnium and titanium and ozone and nitrogen and silicon and reactant	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/24 13:44
S23	0	carlson.in. and bhat.in. and gearly.in.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/24 13:44
S24	7	carlson.in. and bhat.in. and gearly.in.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/24 13:45
S25	96	(carlson.in. or bhat.in. or gearly.in.) and ALD	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/24 13:45

S26	31	((chris near3 carlson).in. or (vishwanath near3 bhat).in. or (daniel near3 gealy).in.) and ALD	US- PGPUB; USPAT; USOCR	OR	ON	2007/08/24 13:46
S27	42	((chris or christopher) near3 carlson).in. or (vishwanath near3 bhat).in. or ((daniel or dan) near3 gealy).in.) and ALD	US- PGPUB; USPAT; USOCR	OR	ON	2007/08/24 13:46
S28	663	(ALD or (atomic adj layer adj deposition)) same (capacitor with dielectric)	US- PGPUB; USPAT; USOCR	OR	ON	2007/08/27 14:50
S29	1	("20040033688").PN.	US- PGPUB; USPAT	OR	OFF	2007/08/27 14:51
S30	190	(ALD or (atomic adj layer adj deposition)) same (first adj metal) same (second adj metal)	US- PGPUB; USPAT; USOCR	OR	ON	2007/08/27 15:01
S31	18	(ALD or (atomic adj layer adj deposition)) same (first adj metal) same (second adj metal) same reactant	US- PGPUB; USPAT; USOCR	OR	ON	2007/08/27 15:15
S32	19	(ALD or (atomic adj layer adj deposition)) same (ternary with oxide)	US- PGPUB; USPAT; USOCR	OR	ON	2007/08/27 15:25
S33	4	("6576053") or ("5104690") or ("5043049") or ("20010024387").PN.	US- PGPUB; USPAT	OR	OFF	2007/08/27 15:19
S34	175	(ALD or (atomic adj layer adj deposition)) same ((ternary or composite) with oxide)	US- PGPUB; USPAT; USOCR	OR	ON	2007/08/27 15:25

S35	46	("20010050039"   "20010054381"   "20020086111"   "20020108714"   "20020187256"   "20030031807"   "20030032281"   "20030129826"   "20030183171"   "5879459"   "5925411"   "5972430"   "6174377"   "6200893"   "6270572"   "6287965"   "6301434"   "6305314"   "6355561"   "6387185"   "6391785"   "6403156"   "6426307"   "6451119"   "6451695"   "6468924"   "6475276"   "6475286"   "6475910"   "6482262"   "6534395"   "6585823"   "6586343"   "6589886"   "6590251"   "6602784"   "6630401"   "6638862"   "6664192").PN. OR ("6753271").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/27 16:55
S36	33	2002/0086111	US-PGPUB; USPAT	OR	ON	2007/08/28 13:20
S37	1	"20040149225"	US-PGPUB; USPAT	OR	ON	2007/08/28 12:56
S38	175	(ALD or (atomic adj layer adj deposition)) same ((ternary or composite) with oxide)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/28 14:17
S39	151	S38 and dielectric	US-PGPUB; USPAT	OR	ON	2007/08/28 13:10
S40	64	S38 and ozone	US-PGPUB; USPAT	OR	ON	2007/08/28 13:10
S41	7	S36 and byun.in.	US-PGPUB; USPAT	OR	ON	2007/08/28 13:20
S42	1	("6509280").PN.	US-PGPUB; USPAT	OR	OFF	2007/08/28 13:51
S43	32	("20020094632"   "20020100418"   "20020108570"   "5923056"   "6335240").PN. OR ("6509280").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/28 14:14

S44	8	(sung near3 choi).in. and ALD	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/28 14:14
S45	23	(ALD or (atomic adj layer adj deposition)) same ((ternary or composite) with oxide) same pulse	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/28 14:18
S46	0	("(ALDor(atomicadjlayeradjdeposition))same(TMAor(trimethyladjaluminum)or(trimethylaluminum))same(TMEAHor(tetrakisadjmethylethylamidoadjhafnium)or(tetrakisadjmethylethylamidoadjhafnium)or(tetrakisadjmethylethylamidoadjhafnium)or(tetrakisadjmethylethylamidoadjhafnium))").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/12/11 15:18
S47	2	(ALD or (atomic adj layer adj deposition)) same (TMA or (trimethyl adj aluminum) or (trimethylaluminum)) same (TMEAHor (tetrakis adj methylethylamido adj hafnium))	US-PGPUB; USPAT	OR	ON	2007/12/11 15:20
S48	155	(ALD or (atomic adj layer adj deposition)) same aluminum same hafnium and (TMA or (trimethyl adj aluminum))	US-PGPUB; USPAT	OR	ON	2007/12/11 15:53
S49	3	(ALD or (atomic adj layer adj deposition)) same aluminum same hafnium and (TMA or (trimethyl adj aluminum)) and (TMEAHor (tetrakis adj methylethylamido adj hafnium))	US-PGPUB; USPAT	OR	ON	2007/12/11 15:26
S50	0	("2007/0252244").URPN.	USPAT	OR	ON	2007/12/11 15:22
S51	13	(US-20050009311-\$ or US-20040171280-\$ or US-20050116306-\$ or US-20030207593-\$ or US-20020086111-\$).did. or (US-6753271-\$ or US-7135421-\$ or US-6509280-\$ or US-6287965-\$ or US-7141500-\$ or US-6590251-\$ or US-6846516-\$ or US-7012027-\$).did.	US-PGPUB; USPAT	OR	ON	2007/12/11 15:22
S52	7	S51 and aluminum same hafnium	US-PGPUB; USPAT	OR	ON	2007/12/11 15:23
S53	33	(ALD or (atomic adj layer adj deposition)) same aluminum same hafnium same ozone	US-PGPUB; USPAT	OR	ON	2007/12/20 11:31

S54	8	(ALD or (atomic adj layer adj deposition)) same aluminum same hafnium same ozone same puls\$3	US- PGPUB; USPAT	OR	ON	2007/12/11 15:35
S55	39	(ALD or (atomic adj layer adj deposition)) same aluminum same hafnium same puls\$3 and (TMA or (trimethyl adj aluminum))	US- PGPUB; USPAT	OR	ON	2007/12/11 15:54
S57	121	((hafnium adj aluminium adj oxide) (hafnium adj aluminate) (HfAlO)) same ald	US- PGPUB; USPAT	OR	ON	2007/12/20 11:32
S58	121	((hafnium adj aluminium adj oxide) (hafnium adj aluminate) (HfAlO)) same ald	US- PGPUB; USPAT	OR	ON	2007/12/20 11:35
S59	0	((hafnium adj aluminium adj oxide) (hafnium adj aluminate) (HfAlO)) same ald and (TMA or (trimethyl adj aluminum) or (trimethylaluminum)) same (TMEAH or (tetraakis adj methylethylamido adj hafnium))	US- PGPUB; USPAT	OR	ON	2007/12/20 11:37
S60	36	((hafnium adj aluminium adj oxide) (hafnium adj aluminate) (HfAlO)) same ald and (TMA or (trimethyl adj aluminum) or (trimethylaluminum))	US- PGPUB; USPAT	OR	ON	2007/12/20 11:40
S61	17	(ALD or (atomic adj layer adj deposition)) and ((aluminum adj hafnium adj oxide))	US- PGPUB; USPAT	OR	ON	2008/01/17 16:27
S62	8	(ALD or (atomic adj layer adj deposition)) and ((aluminum same hafnium same oxide)) and (carlson.in. bhat.in. gearly.in.)	US- PGPUB; USPAT	OR	ON	2008/01/17 16:29
S63	1375	(ALD or (atomic adj layer adj deposition)) and ((aluminum same hafnium same oxide))	US- PGPUB; USPAT	OR	ON	2008/01/17 16:30
S64	551	(ALD or (atomic adj layer adj deposition)) same ((aluminum same hafnium same oxide))	US- PGPUB; USPAT	OR	ON	2008/01/17 16:30
S65	32	(ALD or (atomic adj layer adj deposition)) same ((aluminum same hafnium same oxide same ozone))	US- PGPUB; USPAT	OR	ON	2008/01/17 16:43

S66	106	(ALD or (atomic adj layer adj deposition)) same ((hfalo (hafnium adj aluminate)))	US- PGPUB; USPAT	OR	ON	2008/01/17 16:44
S67	3	(ALD or (atomic adj layer adj deposition)) same ((hfalo (hafnium adj aluminate))) same ozone	US- PGPUB; USPAT	OR	ON	2008/01/17 16:44
S68	12	(ALD or (atomic adj layer adj deposition)) same ((hfalo (hafnium adj aluminate))) and ozone and TMA	US- PGPUB; USPAT	OR	ON	2008/01/17 16:46
S69	106	(ALD or (atomic adj layer adj deposition)) same ((hfalo (hafnium adj aluminate)))	US- PGPUB; USPAT	OR	ON	2008/01/17 16:49
S70	0	(ALD or (atomic adj layer adj deposition)) and (hafnium with alumina with ozone with react with both)	US- PGPUB; USPAT	OR	ON	2008/01/17 16:49
S71	3246	((aluminum alumina) near2 (hafnium hafnia)) or ((aluminum alumina) near2 (hafnium hafnia) near2 oxide) and ALD	US- PGPUB; USPAT	OR	ON	2008/01/29 10:26
S72	3246	((aluminum alumina) near2 (hafnium hafnia)) or ((aluminum alumina) near2 (hafnium hafnia) near2 oxide) same ozone and ALD	US- PGPUB; USPAT	OR	ON	2008/01/29 10:26
S73	541	((aluminum alumina) near2 (hafnium hafnia)) or ((aluminum alumina) near2 (hafnium hafnia) near2 oxide) same ozone) and ALD	US- PGPUB; USPAT	OR	ON	2008/01/29 10:27
S74	14	((aluminum alumina) near2 (hafnium hafnia)) or ((aluminum alumina) near2 (hafnium hafnia) near2 oxide) same ozone and ALD	US- PGPUB; USPAT	OR	ON	2008/01/29 10:27
S75	14	((aluminum alumina) near2 (hafnium hafnia)) or ((aluminum alumina) near2 (hafnium hafnia) near2 oxide) same ozone) and ALD	US- PGPUB; USPAT	OR	ON	2008/01/29 10:28
S76	541	((aluminum alumina) near2 (hafnium hafnia)) or ((aluminum alumina) near2 (hafnium hafnia) near2 oxide)) and ALD	US- PGPUB; USPAT	OR	ON	2008/01/29 10:31



S77	66	(((aluminum alumina) near2 (hafnium hafnia)) or ((aluminum alumina) near2 (hafnium hafnia) near2 oxide)) same react\$3 and ALD	US-PGPUB; USPAT	OR	ON	2008/01/29 10:31
S78	20	(aluminum same hafnium) same (binary with oxide) and ozone and ald	US-PGPUB; USPAT	OR	ON	2008/01/29 11:04
S79	3	("2004/0238872").URPN.	USPAT	OR	ON	2008/01/29 12:49
S80	7	ald and (hafnium with (TMEAH (tetrakis adj methylethylamido adj hafnium)))	US-PGPUB; USPAT	OR	ON	2008/01/29 13:47
S81	6	ald and (hafnium same TMEAH)	US-PGPUB; USPAT	OR	ON	2008/01/29 13:49
S82	59	ald and (hafnium same TDMAH)	US-PGPUB; USPAT	OR	ON	2008/01/29 13:49
S83	54	ald and (hafnium with TDMAH)	US-PGPUB; USPAT	OR	ON	2008/01/29 13:49
S84	7	TMEAH	US-PGPUB; USPAT	OR	ON	2008/01/29 15:10
S85	4	(tetrakis adj methylethylamido adj hafnium) (tetrakis adj methyl adj ethylamido adj hafnium) (tetrakis adj methyl adj ethyl adj amido adj hafnium)	US-PGPUB; USPAT	OR	ON	2008/01/29 15:12
S86	32710	dielectric adj layer with silicon	US-PGPUB; USPAT	OR	ON	2008/01/29 15:53
S87	172	dielectric adj layer with silicon with ALD	US-PGPUB; USPAT	OR	ON	2008/01/29 15:53
S88	7	dielectric adj layer with germanium with ALD	US-PGPUB; USPAT	OR	ON	2008/01/29 15:54

S89	53	"high-k" adj dielectric adj layer with (germanium silicon) same ALD	US-PGPUB; USPAT	OR	ON	2008/01/29 16:05
S90	19	HfSiO with ALD	US-PGPUB; USPAT	OR	ON	2008/01/29 16:09

1/30/2008 2:47:47 PM  
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